



Heathrow Tower
Courtesy NATS Press Office

ADVANCED
HUMAN FACTORS IN AVIATION SAFETY:
AN INTEGRATED APPROACH TO SAFETY MANAGEMENT
TRAINING COURSE

LISBON
19-23 JUNE 2017



AN EAAP-RECOGNISED TRAINING COURSE
KINDLY HOSTED BY NAV PORTUGAL



The 3rd EAAP-recognised Advanced
Human Factors in Aviation Safety:
An integrated approach to safety management

training course will be conducted in Lisbon, Portugal
between 19-23 June 2017, kindly hosted by NAV Portugal.

*Please note that this training course will commence at 09:00 on
Monday 19th June and conclude late afternoon on **Friday 23rd June 2017.**



Course overview

The EAAP-recognised *Advanced Human Factors in Aviation Safety* training course was first conducted in Barcelona in 2015, followed by Dubai in 2016. The Advanced HF training course was developed by Dr Rob Lee and Brent Hayward on the basis of their collective experience as aviation psychologists and applied human factors consultants, practicing in both the civil and military sectors of aviation and other safety-critical industries, including nuclear power, healthcare, shipping, resource mining and rail.

It is a practical advanced human factors training course, which builds on the foundation set by completion of the initial *Human Factors in Flight Safety* training course, conducted by Rob Lee, Brent Hayward and Kristina Pollack on behalf of EAAP since 1999. The Advanced course is based on current and forecast developments in the application of aviation psychology and human factors to safety management in civil and military aviation.

Course rationale

In recent years there have been significant and ongoing changes in all areas of civil and military aviation, particularly in the adoption of integrated safety management systems (ISMS).

Aviation safety is evolving from a focus on systemic, but reactive, investigation to an equal emphasis on proactive hazard identification and systemic risk management. These developments are epitomised by the issue of the first new ICAO annex for 30 years, Annex 19 on Safety Management, which became applicable in November 2013. Annex 19 contains a new international standard for SMS, which ICAO Contracting States are implementing through their domestic civil aviation legislation.

Military aviation has mirrored these developments, with collaborative activities including greater exchange of experience and cooperation in safety management with civil agencies – including airlines, regulators, ANSPs and aircraft accident investigation agencies.

Such initiatives have placed an even greater emphasis on the need for the broader practical application and development of aviation psychology and human factors knowledge and professional expertise, in addition to their traditional fields of application such as selection and training.

Reflecting this changing and expanding aviation psychology and human factors environment, there were many requests from people who completed the initial EAAP *Human Factors in Flight Safety* training course for an additional 'next step' HF training course which would address new and emerging aviation psychology and human factors issues, as well as providing more in-depth experiential training on some of the topics introduced in the initial course.



The 1st EAAP Advanced Human Factors in Aviation Safety training course, Barcelona, May 2015

Human Factors in Aviation Safety - An integrated approach to safety management will review and cover some key topics from the initial course on *Human Factors in Flight Safety* in greater depth, and include new material, topics and approaches not covered in the initial course. There will also be a strong emphasis on learning from practical exercises and group work.

Important note:

Please note that prior completion of the initial EAAP-recognised 'Human Factors in Flight Safety' course is a prerequisite for attending the Advanced Course.



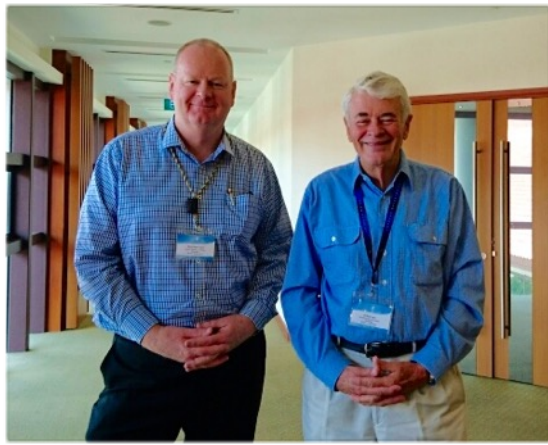
Human Factors in Aviation Safety Advanced Course content includes:

- Brief review and refresher of key subject matter and methodologies covered on the initial EAAP-recognised *Human Factors in Flight Safety* courses.
- Integrated Safety Management Systems (ISMS)
~ Where have we been and where are we now?
- ICAO Annex 19 on Safety Management (2013) ~ Content review including human factors aspects and challenges.
- Human behaviour and the notion of *Practical Drift*
~ Operational challenges and applications.
- Lessons learned: A practical case study ~ The application of *Human Factors in Flight Safety* knowledge and strategies within an airline ~ successes and challenges.
- Human factors aspects of aviation equipment certification.
- The challenges of integrating aviation SMS with Workplace Health and Safety SMS – an increasing requirement in aviation organisations.
- Enhancing your safety culture – Exploring practical methods to achieve positive organisational change.
- Integration of the ICAO Annex 19 SMS components and elements.
- Bow Tie risk management methodology ~ Advanced Bow Tie application and examples with a focus on human factors in both preventive and recovery risk controls.
- Human factors and psychological aspects of safety communication within an organisation – a critical factor in the effectiveness of safety management.
- Application and integration of the ARMS (Aviation Risk Management Solutions) methodology for Operational Risk Assessment into aviation safety investigation and risk management.
- Control-based vs event-based safety management: Application in risk management, safety investigation and safety information systems.
- Advanced systemic investigation and analysis techniques.

All of the above topics will be complemented by a series of applied practical exercises designed to develop and enhance participant knowledge and skills in the application of human factors methods to safety management and investigation.

The intent is that participants will spend about 50% of class time during the advanced *Human Factors in Aviation Safety* course working in small groups on case studies, exercises and discussions focussed on further developing their skills in the practical application of HF knowledge and methods.





The Course Team

The experienced team of Dr Rob Lee and Brent Hayward will present this advanced human factors training course. Rob and Brent have conducted EAAP training courses together since 1999 (previously also with colleague Kristina Pollack), and each of them has extensive practical experience and knowledge in the application of human factors concepts to enhance operational effectiveness and safety in civil and military aviation. This includes the investigation of major accidents and incidents, as well as the development and implementation of integrated safety management systems and a range of applied human factors and safety programs and materials for the aviation industry.

Dr Rob Lee, AO, FRAeS

- Rob is an international consultant on human factors, safety investigation, risk management and systems safety in aviation, rail, nuclear power and health care. He is based in Canberra, Australia.
- In 1977 Rob became the first Royal Australian Air Force (RAAF) psychologist to work on Australian military aircraft accident investigations. He is currently a Group Captain in the RAAF Specialist Reserve.
- Rob was the Director of the Australian Bureau of Air Safety Investigation (BASI) from 1989-1999, pioneering the application of human factors and systems safety investigation concepts.
- Since 2000, Rob has served as an analyst on major civil and military accident investigations in Asia, Europe and the Middle East.
- He works on integrated SMS development, training and implementation, and lectures widely on HF and SMS.
- He has presented and published many papers, and co-authored *Beyond Aviation Human Factors* (1995).
- Received the Second Australian Aviation Psychology Association (AAvPA) Aviation Human Factors Achievement Award, November 2000.
- Received *The Guild of Air Pilots & Air Navigators* (GAPAN) 2010 Australian Bi-Centennial Award.
- Rob was awarded an *Order of Australia* (AO) for distinguished services to aviation safety in 2012.
- Received the 6th EAAP award for *Outstanding Commitment and Achievement in Aviation Psychology*, Malta, September 2014.
- Most recently Rob received the *Specialist Gold Award* and the *Roger Green Medal* from the Royal Aeronautical Society in London "for exceptional work that has led to substantial advances in specialist disciplines in the aerospace industry", London, November 2015.

Brent Hayward

- Brent is Managing Director of Dédale Asia Pacific, an international consulting company working in aviation psychology, human factors and systems safety. He is based in Melbourne, Australia.
- He has spent more than 35 years working in applied aviation psychology, with the RAAF Psychology Service, Australian Airlines, QANTAS, and as a consultant to various airlines, ANSPs, aircraft manufacturers, airports and regulators.
- He has extensive experience in the investigation of human factors aspects of both military and civil aircraft accidents and incidents.
- Brent has developed and delivered training in aviation psychology, human factors, CRM, systemic safety investigation, and safety culture enhancement for a range of organisations in Australia, Africa, the Asia Pacific, Europe, the Middle East, North and South America.
- He also consults on a variety of human factors and safety management issues within the aviation, railway operations, maritime, health care, and nuclear power domains.
- Founding President of the Australian Aviation Psychology Association (AAvPA; 1992-2000); Member of APS, EAAP, the Human Factors and Ergonomics Society, and the International Society of Air Safety Investigators (ISASI).
- Develops and produces various aviation safety training media and films, including: *The Dryden Accident*, *Safety Culture Evolution*, and *ASSIST*.
- Author and editor of numerous HF and safety publications and conference presentations.
- Received the 3rd AAvPA Aviation Human Factors Achievement Award, Sydney, November 2003.

Essential Details

Course Dates

The course will run from **09:00** hrs on Monday 19 June through to **17:00** hrs on Friday 23 June 2017.

Course Location

The course will be hosted by **NAV Portugal** at their training centre, located a few minutes walk from *Lisbon International Humberto Delgado Airport* (LIS).

Hotel Accommodation

NAV Portugal has secured a block accommodation booking with an excellent room rate at the newly opened *Hotel Star Inn Lisbon*, a modern 3-star hotel just a few minutes walk from both Lisbon Airport and the NAV Portugal training centre. The airport precinct is well connected by public transport to Lisbon city centre, with the Lisbon Airport Metro station also within five minutes walk of the hotel.

The *Star Inn Lisbon* hotel is offering EAAP course participants the special room rate of **90 €** per night (Single occupancy) or **101 €** (Double occupancy) for reservations received by **31 May 2017**.

The nightly room rate includes buffet breakfast in the hotel restaurant, complimentary high speed *WiFi* internet access, free airport shuttle and all other service charges and local taxes.

It is recommended that non-local participants stay at the *Star Inn Lisbon* hotel.

The hotel's address and contact details are:

Hotel Star Inn Lisboa

Aeroporto Internacional de Lisboa

Rua C, Número 2, 1749-125 Lisboa, Portugal

Telephone: +351 218 425 700

email: reservas.lisbon@hotelstarinn.com

www: www.hotelstarinn.com/en/lisbon-airport-hotels

To make hotel reservations:

To guarantee your hotel room at the special NAV Portugal / EAAP Course rate, please make your reservation directly with the hotel before **31 May 2017**, as follows:

Email your booking request directly to:

carlota.outeiro@meliaportugal.com

quoting "**Block Booking Code NAV2017**", stating your name, date and expected time of arrival, departure date, and number of persons per room.

Please also send a Cc copy of your hotel reservation request by email to: bhayward@dedale.net

Please note: The above process must be followed by 31 May 2017 to guarantee the special NAV Portugal EAAP Course hotel room rate.

Course Registration Fee

EAAP Members: 1,800 EUR. Others: 2,200 EUR.

The course registration fee covers all course materials and tuition, a *Course Welcome* function on the evening of Monday 19 June, a *Course Dinner* on the evening of Thursday 22 June, and daily refreshment breaks.

Please note: While attendance at the above evening functions is voluntary, no discount or refund will be made for those who are unable to attend.

SPECIAL NOTE: An **Early Bird discount of 200 EUR** will apply to all registrations received by **15 May 2017**.

Payment of Fees

Fee payment should be made ASAP after registration, by electronic funds transfer to the following account:

Bank: Commonwealth Bank of Australia
Branch: Albert Park, Australia
Address: 95-97 Dundas Place, Albert Park
Account name: EAAP Human Factors Training
Account no: 063-100 1031 8550
Swift code: CTBAAU2S

Please include the course participant's name and organisation when making electronic payment.

Course Registration Deadline

To guarantee your place on this course, please complete and email or fax the attached *Registration Form* to Brent Hayward before **31 May 2017**.

Further Information

For further information on course registration, content, training venue, fee payment, hotel, or any other administrative matters, please contact Brent Hayward: bhayward@dedale.net

EAAP Accreditation & Membership

Completion of this training course is recognised by the European Association for Aviation Psychology (EAAP) as contribution towards accreditation as an *Aviation Psychologist* or *Human Factors Specialist*. Established in 1956, EAAP is an international, professional, independent, non-profit organisation dedicated to the promotion of aviation safety and efficiency through the application of aviation psychology.

For more information on EAAP membership and accreditation, please visit: www.eaap.net



ADVANCED COURSE REGISTRATION FORM

“Human Factors in Aviation Safety: An integrated approach to safety management”

**Advanced Human Factors Training Course
19-23 June 2017, Lisbon, Portugal**

Please complete and send this form ASAP to Brent Hayward
by e-mail: bhayward@dedale.net or fax: +61 3 9645 5472

Participant Details:

First name/s:	Family name:	
Title (Dr/Capt/Mr/Ms/other):	Job function / Job title:	
Organisation:	Location & Year of initial EAAP HF in Flight Safety course:	
Postal address		
City	Postcode	Country
Tel:	Email:	

Registration Fee to be paid: (please select one only)

Early Bird Fee * (pay by 15 May):	EAAP Member: 1,600 € <input type="checkbox"/>	Non-Member: 2,000 € <input type="checkbox"/>
Standard Fee (pay after 15 May):	EAAP Member: 1,800 € <input type="checkbox"/>	Non-Member: 2,200 € <input type="checkbox"/>

*** Please note:**

1. Payment of the Early Bird fee **must be made by 15 May 2017.**
2. For all Registration Fee payments please arrange electronic funds transfer to:

Bank: Commonwealth Bank of Australia
Branch/Address: Albert Park, 95-97 Dundas Place
Account name: EAAP Human Factors Training
Account no: 063-100 1031 8550
Swift code: CTBAAU2S

Please provide participant's name and organisation when making payment.

For enquiries regarding registration please contact Brent Hayward: bhayward@dedale.net



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